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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Fred Buchali

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11/15/2006

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EXAMINER

CURS, NATHAN M

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/977,297	BUCHALI, FRED	
	Examiner	Art Unit	
	Nathan Curs	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2 and 7 is/are allowed.
- 6) ☒ Claim(s) 3 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. ("Sakamoto") (US Patent No. 5736875).

Regarding claim 3, Sakamoto discloses a high-speed eye monitor (fig. 5 and col. 5, line 65 to col. 6, line 31) comprising: first and second threshold-value decision elements for deciding a level of a data signal based on first and second threshold values which are set close to vertices of an eye opening of an eye diagram (fig. 5, elements 12 and 13); first and second signal comparators for determining pseudo-errors by comparing decided signals output by the threshold-value decision elements with a correct signal (fig. 5, elements 17 and 17); first and second integrators for integrating the pseudo-errors output by the first and second signal comparators to generate first and second internal control variables (fig. 5, elements 15 and 16); and first and second regulators which correct the first and second threshold values based on comparisons between the first and second internal control variables and first and second setpoint values, respectively (fig. 5, elements 22 and 23).

Regarding claim 6, Sakamoto discloses a method for measuring the eye opening of an eye diagram, the method comprising: determining a level of a data signal based on first and second threshold values which correspond approximately to vertices of the eye opening to generate first and second data signals with pseudo-errors (fig. 5, elements 12 and 13 and col. 5,

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line 65 to col. 6, line 31); detecting first and second pseudo-errors by comparing the first and second data signals with a correct signal (fig. 5, elements 17 and 17 and col. 5, line 65 to col. 6, line 31); integrating the first and second pseudo-errors (fig. 5, elements 15 and 16 and col. 5, line 65 to col. 6, line 31); comparing the integrated first and second pseudo-errors with first and second setpoint values, respectively, and correcting the first and second threshold values based on the comparisons between the integrated first and second pseudo-errors and the first and second setpoint values (fig. 5, elements 22 and 23 and col. 5, line 65 to col. 6, line 31); and generating a differential signal of the corrected first and second threshold values as a measurement value of the eye opening (fig. 5, element 24).

Allowable Subject Matter

3. Claims 1, 2 and 7 are allowed.
4. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 1 September 2006, with respect to the rejection(s) of claim(s) 1-7 under Tremblay (US Patent No. 4823360) in view of Sakamoto (US Patent No. 5736875) have been fully considered and are at least partially persuasive with respect to the argument of the combination of Tremblay and Sakamoto causing overlapping roles of reference voltages used to control thresholds. Since Tremblay's "integrators" include reference voltages for controlling threshold signals (Tremblay fig. 3, elements Vref+ and Vref-), and Sakamoto's

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"regulators" also use reference voltages to control threshold signals (Sakamoto fig. 5, elements 25 and 26 used to control V1 which also establishes +V and -V), the examiner acknowledges that when combining Sakamoto with Tremblay to overcome Tremblay's lack of the claimed first and second "regulators", the role of the reference voltages of Sakamoto would at least overlap the role of the reference voltages of Tremblay. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sakamoto alone for claims 3 and 6.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


- US Patent No. 6519302 – This patent discloses the actual circuit of Tremblay used as a separate monitoring unit from a regenerating unit. However, this patent like Tremblay, does not disclose the claimed "regulators".

7. Any inquiry concerning this communication from the examiner should be directed to N. Curs whose telephone number is (571) 272-3028. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (800) 786-9199.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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